

**WHAT IS CLAIMED IS:**

1. A flexible weighing device comprising:
  - a) at least one measuring cell, which cell yields an electrical signal proportional to its deformation;
  - b) a processing circuitry, which circuitry computes the overall signal resulting from the electrical signal from the at least one measuring cell; and
  - c) a display, which shows the overall signal computed by the processing circuitry.
2. The device of claim 1, wherein the at least one measuring cell is flexible.
3. The device of claim 1, wherein the at least one measuring cell is non-flexible.
4. The device of claim 1, wherein there are at least two measuring cells flexibly connected.
5. The device of claim 4, wherein the at least two measuring cells are flexible.
6. The device of claim 4, wherein the at least two measuring cells are non-flexible.
7. The device of claim 4, wherein at least one of the at least two measuring cells is non-flexible.
8. The device of claim 4, wherein at least one of the at least two measuring cells is flexible.
9. The device of claim 1, wherein the processing circuitry uses cable connections.

10. The device of claim 1, wherein the processing circuitry uses wireless connections
11. The device of claim 1, wherein the processing circuitry uses a combination of cable and wireless connections.
12. The device of claim 1, wherein the processing circuitry is integrated onto the said weighing device.
13. The device of claim 1, wherein the processing circuitry is separated from the said weighing device.
14. The device of claim 1, wherein the display is a visual display or an audio display.
15. The device of claim 1, wherein the display is flexible.
16. The device of claim 14, wherein the display is integrated onto the said weighing device.
17. The device of claim 14, wherein the display is separate from the said weighing device.
18. The device of claim 1, wherein the at least one measuring cell provides instantaneous signal.
19. The device of claim 1, wherein the measuring cell is constructed of a flexible resistive elastomer.

20. The device of claim 1, wherein the measuring cell is constructed of a flexible resistive elastomer embedded in a flexible insulating elastomer.
21. The device of claim 1, wherein the measuring cell is constructed of a piezo-resistive sensor.
22. The device of claim 1, wherein the measuring cell is constructed of a 1-dimensional (semi-)conductive elastomer.
23. The device of claim 4, wherein the at least one measuring cell is flexibly connected by a flexible insulating elastomer.
24. A method for measuring the weight of a moving object, said method comprising
  1. providing on a surface a flexible weighing device comprising
    - a) at least one measuring cell, which cell yields an electrical signal proportional to its deformation,
    - b) a processing circuitry, which circuitry computes the overall signal resulting from the electrical signal from the at least one measuring cell, and
    - c) a display, which shows the overall signal computed by the processing circuitry,wherein said measuring cell provides an instantaneous signal that is processed by the processing circuitry and shown on the display; and
  2. moving said object over the flexible weighing device in a manner sufficient to allow the measuring cell to deform;
  3. reading the weight shown on the display.